

Statewide List of Typical Conservation Practice Installation/Component Costs

The following list displays typical component and installation costs for conservation practices. This list is not intended as a basis for payment in any particular cost-share program. It is intended to provide rough estimates of what "typical" conservation practices may cost to install. Costs vary across regions and depend on site-specific conditions.

Practice Name	NRCS Code	Unit	Estimated Installation Cost (per unit)	Sources and Notes for Installation Costs
Access Road	560	ft.	\$15	EQIP average cost data.
Agrichemical Handling Facility	702	ea.	\$40,000	AMA and EQIP average cost data.
Basin for Dredged Material	350AA	ea.	\$7,000	
Brush Management	314	ac.	\$90	FIP rate for brush cutting.
Closure of Waste Impoundments	360	ea.	\$10,000	EQIP average cost data.
Composting Facility	317	ea.		These are flat rates for the MACS Program. For more information, see the MACS Manual.
2-bin inside (roofless)			\$2,300	
4-bin inside (roofless)			\$3,300	
6-bin inside (roofless)			\$4,300	
2-bin outside (any approved type)			\$4,500	
4-bin outside (any approved type)			\$6,000	
6-bin outside (any approved type)			\$8,000	
8-bin outside (any approved type)			\$10,000	
10-bin outside (any approved type)			\$12,000	
12-bin outside (any approved type)			\$14,000	
Conservation Cover	327	ac.	\$500	Average of establishment rates for 327 under WHIP.
Conservation Crop Rotation	328	ac.	---	Varies depending on site conditions. Generally low cost practice.
Contour Buffer Strips	332	ac.	\$650	Average of 328 and 342 rates (\$500/ac & \$800/ac).
Contour Farming	330	ac.	\$20	MACS flat rates.
Contour Orchard	331	ac.	\$20	MACS flat rates.
Cover Crop	340	ac.	\$20	MDA Cover Crop Program.
Critical Area Planting	342	ac.	\$800	Average of MACS flat rates.
Diversion	362	ft.	\$3	Average of MACS flat rates.
Dry Hydrant	432	ea.	\$1,500	Average cost data from the RC&D program.
Fence	382	ft.	\$3	Average of MACS flat rates.
Field Border	386	ac. ¹	\$500	Average of warm, cool season, shrub establishment rates from WHIP.
Filter Strip	393	ac.	\$350	Average of warm, cool season grass establishment rates under WHIP.
Forage Harvest Management	511	ac.		For more detailed information on custom rates, go here: http://www.nass.usda.gov/md/report.pdf Forage harvesters can cover 2 to 5 acres per hour, depending on size. Go here for estimates of time required for various field operations: http://www.extension.umn.edu/distribution/businessmanagement/DF6696.pdf
baling, small bales		bale	\$0.50	
cut, rake, bale, and store		bale	\$1.25	
baling, large round bales		bale	\$8	
baling, large square bales		bale	\$8	
wrapping bales		bale	\$5	
pull-type chopper and tractor		hr.	\$55	
self-propelled chopper		hr.	\$103	
blower		hr.	\$11	
field chop, haul, and fill silo		ton	\$6	
bagging silage		ft.	\$5	
Forest Stand Improvement	666	ac.	\$100	FIP rates.
Grade Stabilization	410	ea.	\$7,000	Average project cost data from MACS
Grassed Waterway	412	ft. ²	\$3	MACS flat rates.
Heavy Use Area Protection	561	ac.		- from MACS flat rates - from MACS flat rates - critical area planting rate
concrete, including stone and wire mesh		sft.	\$4	
asphalt, including site prep., filter cloth, stone vegetative		sft. ac.	\$4 \$800	
Hedgerow Planting	422	ac. ¹	\$600	Average of hardwood, softwood, and shrub establishment rates under WHIP.
Lined Waterway or Outlet	468	ft.	\$30	Mid-Atlantic EQIP data.

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Nutrient Management	590	ac.	\$4 - \$7	MACS flat rates for cropland.
Pasture and Hay Planting	512	ac.	\$70	EQIP average cost data.
Pest Management	595	ac.	\$6	Based on MD EQIP incentive rate.
Pipeline	516	ft.		Ranges based on MACS county flat rates.
8" Plastic			\$10 - \$14	
6" Plastic			\$4 - \$7	
4" Plastic			\$3 - \$5	
2" Plastic			\$2 - \$4	
Pond	378	ea.	\$17,500	Average installation cost.
Pond Sealing or Lining	521	ea.	N/A	Not available.
Prescribed Grazing	528A	ac.	----	This is a management practice for which costs can vary considerably. See Standard 528 for details.
Residue Management, Mulch Till	329B	ac.	----	See Maryland Custom Rates for differences between conventional and reduced tillage per acre rates. http://www.nass.usda.gov/md/report.pdf
Residue Management, No-Till & Strip Till	329A	ac.	----	
Residue Management, Ridge Till	329C	ac.	----	
Residue Management, Seasonal	344	ac.	----	
Riparian Forest Buffer	391	ac.	\$1,800	Based on MACS and CREP flat rates. Final total installation cost can vary greatly, depending on percentage of trees protected with shelters and stocking rate.
cool season grasses			\$300	
warm season grasses			\$400	
softwood tree planting			\$425	
hardwood tree planting			\$575	
shrub planting			\$800	
tree shelters		ea.	\$4 - \$7	
Roof Runoff Structure	558	ea.	\$6,000	Average project cost data from MACS. Component costs are from MACS county flat rates.
5" gutters		lf.	\$5 - \$9	
6" gutters		lf.	\$7 - \$10	
2" x 6" fascia		lf.	\$3 - \$5	
2" x 8" fascia		lf.	\$4 - \$6	
2" x 10" fascia		lf.	\$5 - \$8	
2 x 3 inch downspout		lf.	\$3	
3 x 4 inch downspout		lf.	\$4 - \$8	
Sediment Basin	350	ea.	\$7,000	Average project cost data from MACS.
Shallow Water Area for Wildlife	646	ac.	\$2,000	WHIP flat rate.
Sinkhole & Sinkhole Area Treatment	725	ea.	----	Too variable to estimate on unit basis.
Spring Development	574	ea.	\$5,000	Average project cost data from MACS and EQIP.
Stream Crossing	728	ea.	\$4,700	Average project cost data from MACS.
Streambank & Shoreline Protection	580	ft.	\$50 - \$100	Can vary significantly based on site conditions.
Stripcropping, Contour	585	ac.	\$20	Statewide MACS flat rate.
Stripcropping, Field	586	ac.	\$20	Statewide MACS flat rate.
Structure for Water Control	587	ea.	\$3,000	Average project costs from EQIP.
Subsurface Drain	606	ft.		County MACS flat rates.
excavation and fill		cyd.	\$3 - \$4	
corrugated polyethylene perf. drain tube 4"		ft.	\$2 - \$3	
corrugated polyethylene perf. drain tube 6"		ft.	\$3 - \$4	
corrugated polyethylene perf. drain tube 8"		ft.	\$4 - \$5	
corrugated polyethylene perf. drain tube 10"		ft.	\$5 - \$7	
corrugated polyethylene perf. drain tube 12"		ft.	\$6 - \$8	
Surface Drainage , Field Ditch	607	ft.		County MACS flat rates.
excavation and fill		cyd.	\$3 - \$4	
Surface Drainage , Main or Lateral	608	ft.		County MACS flat rates.
excavation and fill		cyd.	\$3 - \$4	
Terrace	600	ft.	\$3	MACS flat rates.
Tree/Shrub Establishment	612	ac.	\$600	Can vary greatly depending on tree shelter costs.
Underground Outlet	620	ft.	\$12	Average project costs from EQIP.

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Upland Wildlife Habitat Management	645	ac.	----	This is a management practice that can consist of several other practices. See Standard 645 for details.
Use Exclusion	472	ac.	----	Too variable to estimate on unit basis. See Standard 472 for details.
Waste Storage Facility	313	ea.		Total cost can vary widely based on herd size and length of storage period desired. Per cubic foot figures are flat rate limits for the MACS program.
cattle		ea.	\$50,000	
poultry		ea.	\$24,000	
horses		ea.	\$12,000	
> 16,000 cft		cft.	\$3	
8,000 - 16,000 cft		cft.	\$3.50	
< 8,000 cft		cft.	\$4	
Waste Treatment Lagoon	359	ea.	\$20,000 - \$40,000	Total cost can vary widely based on herd size and length of storage period desired.
Waste Utilization	633	ac.		See Maryland Custom Rates here: http://www.nass.usda.gov/md/report.pdf
Manure Loading, Solid		hr.	\$38	
Manure Spreading, Solid		hr.	\$34	
Manure Pumping		hr.	\$28	
Manure Spreading, Liquid		hr.	\$50	
Wastewater Treatment Strip	635	ac.	\$800	See Critical Area Planting 342.
Water and Sediment Control Basin	638	ea.	\$7,000	Average project costs from EQIP.
Water Well	642	ea.		MACS flat rates.
Drilling and casing		ft.	\$10 - \$15	
Watering Facility	614	ea.	\$4,500	Average project cost data from MACS.
Wetland Creation	658	ac.	\$2,000	From WHIP cost list.
Wetland Restoration	657	ac.	\$2,000	From WHIP cost list.
Wetland Wildlife Habitat Management	644	ac.	----	Too variable to estimate on unit basis.
Windbreak/Shelterbelt Establishment	380	ac. ¹	\$600	Based on an average of tree & shrub establishment rates under WHIP.

¹ - Normally reported in linear feet.

² - Normally reported in acres.

AMA - Agricultural Management Assistance Program

EQIP - Environmental Quality Incentives Program

FIP - Forestry Incentive Program

MACS - Maryland Agricultural Water Quality Cost-Share Program

RC&D - Resource Conservation and Development Program

WHIP - Wildlife Habitat Incentives Program

For more information on AMA, EQIP, FIP, RC&D, WHIP, or other federal conservation programs, go to:

<http://www.nrcs.usda.gov/programs/>

For more information on MACS, go to:

<http://www.mda.state.md.us/resource/mawqcs10.htm>

This web site contains state and national EQIP cost data:

<http://www.ers.usda.gov/data/eqip/>